BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 90-588-G - ORDER NO. 98-415

JUNE 4, 1998

IN RE: South Carolina Pipeline Corporation — Maximum Rates for Industrial Customers	)	ORDER ON REMAND

I. INTRODUCTION

This matter comes before the Commission pursuant to the order of the Honorable James E. Brogdon, Jr., which remanded the case to take evidence on and determine a fair overall rate of return for the total operations of South Carolina Pipeline Corporation (" SCPC").

A hearing was held before the Commission on May 20, 1998. SCPC was represented by Mitchell Willoughby and Sarena Burch, and presented the direct testimony of Walter S. Hulse, III, and Burton G. Malkiel and the rebuttal testimony of Mr. Hulse, Dr. Malkiel, and Julius A Wright. The Lancaster, York, and Chester County Natural Gas Authorities (" Authorities") were represented by Emil W. Wald, and presented no witnesses. The Consumer Advocate for the State of South Carolina (" Consumer Advocate") was represented by

Elliott F. Elam, Jr., and presented the testimony of John B. Legler. Nucor Steel ("Nucor") was represented by Russell B. Shetterly, Jr., and presented no witnesses. The City of Orangeburg ("City") was represented by James M. Brailsford, III, and presented no witnesses. The South Carolina Energy Users Committee ("SCEUC") was represented by Daniel B. Lott, Jr., and Kevin F. McDonald, and presented the testimony of Nicholas Phillips, Jr., and Michael Gorman. The Commission Staff was represented by F. David Butler, and presented the testimony of James E. Spearman.

At the beginning of the hearing, the Commission granted the motion of the Commission Staff, which was supported by the Consumer Advocate, to strike certain testimony of SCEUC witness Phillips, the rebuttal testimony of SCPC witness John D. McClellan, and a portion of the rebuttal testimony of SCPC witness Wright, on grounds that such testimony concerning a plant acquisition adjustment was irrelevant. SCEUC and SCPC made offers of proof of the stricken testimony.

II. SUMMARY OF TESTIMONY

WALTER S. HULSE, III

SCPC presented the direct and rebuttal testimony of Walter S. Hulse, III, Managing Director – Group Co-Head of the Integrated Energy and Power Group within PaineWebber Incorporated's Investment

Banking Division. Mr. Hulse selected groups of automotive parts and semiconductor equipment companies as having risks comparable to SCPC because they have revenue streams that are very sensitive to competitors' prices, have customer bases that would be influenced predominately by price when making purchasing decisions, and have customer bases with a limited number of large clients in which the loss of even one customer could have a significant impact on revenues. He rejected electric and gas utilities as comparables because, in most cases, they have large customer bases and very stable cash flow from the distribution aspect of the business. He also rejected SCANA as an appropriate comparable because over 80% of its total assets and net income are derived from SCE&G and the capital markets view SCANA predominantly as a utility.

BURTON G. MALKIEL

SCPC also presented the direct and rebuttal testimony of Burton G. Malkiel, Chemical Bank Chairman's Professor of Economics at Princeton University. Dr. Malkiel applied a DCF analysis to three sample groups of comparable companies: a group of telephone companies, a group of diversified gas companies, and a group of companies in the automotive parts industry and the semiconductor equipment industry that were selected as comparables by witness Hulse. The average return on equity produced by the DCF analysis was 13.6% for the telephone companies, 14.4% for the gas companies, and 19.0% for the Hulse companies. Because SCPC is much smaller than the companies in the telephone and gas groups, Dr. Malkiel determined that the expected return on equity for those sample groups would understate the return on equity required for SCPC. In the opinion of Dr. Malkiel, the small size of the semiconductor companies and the reliance by the automotive parts companies on a limited number of customers for much of their revenue makes the Hulse group a better proxy for SCPC. Dr. Malkiel concluded that a return on equity of 14.5% to 17.0% is appropriate for SCPC.

Dr. Malkiel accepted the December 31, 1997, capital structure of SCPC as appropriate. This structure consisted of 31.47% long-term debt and 68.53% common equity. As of December 31, 1997, SCPC's embedded cost of long-term debt was 6.82%. Using his recommended cost of equity of 14.50% to 17.00%, Dr. Malkiel computed the cost of capital for SCPC of 12.09% to 13.80%.

JOHN B. LEGLER

The Consumer Advocate presented the testimony of John B. Legler, Professor of Banking and Finance in the Terry College of Business at the University of Georgia. Dr. Legler applied a DCF analysis, a risk premium analysis, and CAPM analysis to a group of gas transmission companies followed by Value Line Investment

Survey. Dr. Legler's DCF analysis produced an average return on equity of 11.78% to 12.68%. His risk premium analysis produced an expected return on equity of 10.73% to 11.11%, and his CAPM analysis produced an expected return on equity of 10.19% to 11.30%. Dr. Legler concluded that the return on equity appropriate for SCPC ranged from 10.75% to 12.50% and recommended using the midpoint of 11.60%.

Dr. Legler recommended that the Commission utilize a hypothetical capital structure of 40% long-term debt and 60% common equity for SCPC. This capital structure would more closely resemble the capital structure of the gas transmission companies used in his comparison group. Dr. Legler considered the capital structure of his gas transmission company comparison group to more closely reflect a market determined capital structure than the actual capital structure of SCPC. Using his recommended capital structure, a 6.82% cost of long-term debt, and his recommended cost of equity of 11.60%, Dr. Legler calculated a 9.69% cost of capital as appropriate for SCPC.

NICHOLAS PHILLIPS, JR.

SCEUC presented the testimony of Nicholas Phillips, Jr., a consultant with the firm of Brubaker & Associates, Inc. Mr. Phillips testified that SCPC has a monopoly with respect to transportation of natural gas within the state and that SCPC uses its monopoly power to overcharge industrial customers. In his opinion, SCPC exhibits no more risks than other regulated local distribution companies ("LDCs") or interstate pipelines because its sister company, SCE&G, provides SCPC with approximately 40% of its total revenues and SCPC's largest expense, purchased gas cost, is passed through to customers by an automatic adjustment mechanism. Mr. Phillips also discussed how the Federal Energy Regulatory Commission ("FERC") regulates interstate pipelines.

MICHAEL GORMAN

SCEUC also presented the testimony of Michael Gorman, also a consultant with Brubaker & Associates, Inc. Mr. Gorman used a DCF model, a risk premium model, and a CAPM analysis to determine the return on equity for SCPC. He applied these models to the group of integrated gas companies used by Dr. Malkiel, and to a group of gas distribution companies followed by the Value Line Investment Survey. Both these comparison groups have higher risk than SCPC's parent company, SCANA Corporation. In the opinion of Mr. Gorman, it is reasonable to use a comparison group having somewhat higher risk than SCANA because gas utilities are generally considered somewhat more risky than electric utilities. Mr. Gorman's DCF analysis produced an expected return on equity of 10.5% to 14.62%.

His risk premium analysis produced an expected return of 11.20%, and his CAPM analysis produced an expected return of 10.60% to 11.30%. Mr. Gorman concluded that the appropriate return on equity for SCPC ranged from 10.55% to 11.3%. He recommended that SCPC be authorized a return on common equity of 11.3%.

Mr. Gorman used the year-end 1997 capital structure of SCPC and the 6.82% embedded cost of debt to determine the appropriate cost of capital. Based on his recommended return on equity of 11.30%, Mr. Gorman calculated a 9.89% cost of capital as appropriate for SCPC.

JAMES E. SPEARMAN

The Commission Staff presented the testimony of James E. Spearman, its Research & Planning Administrator. Dr. Spearman applied a DCF analysis and a CAPM analysis to two comparison groups. The companies comprising the Moody's Gas Distribution Index were selected as one comparison group, and the companies comprising the Moody's Gas Transmission Index were selected as the other comparison group. Because SCPC has characteristics of both a gas distribution company and a gas transmission company, these comparison groups would exhibit similar business and financial risks as SCPC. The DCF analysis produced an expected return on equity of approximately 9.0% to 11.0% for the gas distribution comparison group and 13.0% to 16.0% for the gas transmission comparison group. The CAPM analysis produced an expected return on equity of approximately 11.0% to 12.0% for each comparison group. Dr. Spearman weighted the expected return on equity to determine the appropriate company-wide return on equity for SCPC. The expected return on equity of the gas distribution company comparison group was weighted by the percentage of SCPC's revenue derived from its resale gas operations. The expected return on equity of the gas transmission company comparison group was weighted by the percentage of SCPC's revenue derived from its industrial gas operations. Based on this weighting, Dr. Spearman concluded that the appropriate return on equity for SCPC ranged from 10.5% to 13.0%. Dr. Spearman recommended a return on equity of 12.0% to 12.5% as most appropriate.

Dr. Spearman used the February 28, 1998, SCPC capital structure consisting of 33% long-term debt and 67% common equity in his determination of the cost of capital. Based on a 6.82% embedded cost of long-term debt and his recommended cost of equity of 12.0% to 12.5%, Dr. Spearman calculated a 10.3% to 10.6% cost of capital as appropriate for SCPC.

JULIUS A. WRIGHT

SCPC presented the rebuttal testimony of Julius A. Wright, President of J.A. Wright & Associates, Inc. Dr. Wright provided evidence to rebut several assertions contained in Mr. Phillips' testimony on behalf of SCEUC. He testified that Mr. Phillips' statement that SCPC is a monopoly with respect to the transportation of natural gas misrepresents the concept of monopoly and SCPC's business. Because SCPC is not a monopoly in the industrial market, it cannot use a power it does not possess. In addition, the fact that SCPC's margins are capped actually provides the industrial customers with maximum price protection. Dr. Wright recommended that the Commission use a rate of return range to monitor SCPC's future earnings and, if SCPC is consistently outside the target range for at least 2-3 years, the Commission could conduct an earnings review.

III. FINDINGS OF FACT AND CONCLUSIONS OF LAW

In this remand proceeding, the Commission must determine a fair overall rate of return for SCPC's total operations. Determining a company's fair overall rate of return requires that an appropriate capital structure be used. The company's cost of common equity capital and cost of debt are also determined. The rate of return is calculated by weighting the cost of equity and cost of debt according to their percentage of the company's capital structure.

CAPITAL STRUCTURE

Of the four cost of capital witnesses, only Dr. Legler disagreed with using SCPC's actual capital structure. As of December 31, 1997, the company's capital structure consisted of 31.47% long-term debt and 68.53% common equity. Dr. Legler contended that the company's capital structure is not reasonable because the equity ratio is excessive compared to other gas transmission companies, as shown on his Schedule 4. He proposed that the equity ratio be capped at 60%.

The Commission finds that SCPC's actual capital structure is reasonable and rejects the argument that the equity ratio should be capped at 60%. Dr. Legler's Schedule 4 shows that four of the nine companies listed had at one time or another equity ratios that exceeded 60%. SCPC's higher equity ratio is reasonable given that it is more risky than the other companies because of its smaller size and because of the variability and volatility in revenues and returns resulting from its provision of service to the competitive industrial fuels market. Moreover, as Dr. Malkiel testified, a higher debt ratio would not lower SCPC's overall cost of capital. Adding additional debt to SCPC's capital structure would increase the company's cost of both debt and common equity. The Commission will therefore use the actual percentages of SCPC's long-term debt and common equity. We find that SCPC's capital structure at February 28, 1998, as testified to by Dr. Spearman, consists of 33% long-term debt and 67% common equity.

COST OF COMMON EQUITY

In determining the cost of equity capital, the Commission is guided by the standards of Hope and Bluefield: (1) that the company be allowed the opportunity to earn at a level sufficient to attract capital at reasonable cost and (2) that the company be allowed the opportunity to earn at a level comparable to firms facing equivalent risk. See Southern Bell Tel. & Tel. Co. v. Public Service Commission, 270 S.C. 590, 244 S.E.2d 278 (1978) (citing Bluefield Water Works & Improvement Co. v. Public Service Commission, 262 U.S. 679 (1923) and Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944)).

Judge Brogdon's order did not disturb any of our prior findings regarding competition, nor did it instruct us to address this issue. Thus, the issue of competition is not before the Commission because it has already been decided. Notwithstanding this, there is nothing in this remand proceeding that would cause the Commission to change its earlier findings as to the competitiveness of SCPC's industrial fuel market. Rather, the evidence of the variability and volatility of SCPC's revenues and returns confirms this competitiveness. The evidence further showed that as few as ten industrial customers contribute 60% of SCPC's industrial revenues. The decision to switch to an alternate fuel source by just a few of these customers would adversely impact SCPC's revenues. Accordingly, even if the issue were properly before us, the Commission would again reaffirm that SCPC's industrial market is competitive and reject SCEUC's arguments to the contrary.

All four cost of capital witnesses performed a discounted cash flow ("DCF") analysis to arrive at their cost of equity estimates. In addition, Dr. Legler, Mr. Gorman, and Dr. Spearman used a capital asset pricing model ("CAPM"). Dr. Legler and Mr. Gorman also performed a bond plus risk premium analysis. Dr. Malkiel, an eminently qualified authority on capital markets and investment, testified that there were problems with the CAPM and risk premium techniques that make them inappropriate for determining SCPC's cost of equity capital.

For the risk premium analysis, there are questions about what bond rate to use as a base and development of the equity risk premiums was shown to be sufficiently uncertain so that we find it inappropriate to rely on that technique in this case. The Commission is of the opinion that the 60-month historical betas used in the CAPM do not adequately reflect the future (forward-looking) risk faced by SCPC in the rapidly changing utility environment.

Because of the questions raised regarding the risk premium and CAPM techniques, we find that the DCF should be used to determine SCPC's cost of equity capital in this case. We note that, although he applied both the risk premium and CAPM in reaching his estimate, Dr. Legler indicated there were fundamental problems with each of these techniques.

The Commission also finds that security analysts' growth rates will be used in applying the DCF. As Dr. Malkiel, Mr. Hulse, and Mr. Gorman testified, growth estimates of professional security analysts have proved to be the most reliable and accurate indicators of the market's growth expectations for a company's stock. We believe that it is appropriate to consider multiple sources for growth estimates such as I/B/E/S which reflect the concensus of security analysts' estimates, Value Line, Merrill Lynch, and Standard & Poor's. Current stock values are largely driven by stock appreciation rather than dividends. Thus, we consider earnings growth rates to be more appropriate than dividend growth rates at this time.

Dr. Malkiel considered a group of gas companies, a group of telephone companies, and a group of automotive parts and semiconductor equipment companies that was selected by Mr. Hulse to perform his DCF analysis. Dr. Legler used a sample of gas transmission companies that are followed by Value Line. Mr. Gorman used two groups of gas companies, Dr. Malkiel's sample and a sample consisting of gas distribution companies followed by Value Line. Dr. Spearman used companies in Moody's Gas Distribution Stock Index and Moody's Gas Transmission Stock Index and weighted the expected returns for the distribution companies by the percent of SCPC's resale revenues and for the transmission companies by the percent of SCPC's industrial revenues.

Dr. Malkiel testified that his sample of gas transmission companies has the advantage of being in the same general level of business as SCPC and that all of the companies faced heavy competition, as does SCPC. However, he concluded that those companies were not perfectly comparable to SCPC because they were much larger companies, had more stable revenue sources, and were less risky than SCPC. We note, however, that all witnesses testified that there was no one group of companies that were perfectly comparable to SCPC. Dr. Legler stated this concept as follows: " I recognize that it is almost impossible to select a sample of utilities which is strictly comparable to the company being reviewed." We agree with Dr. Legler and other witnesses who offered this same observation.

We believe that SCPC is a gas transmission company, based on our review of its functions. Accordingly, we find that the gas transmission companies analyzed by the cost of capital witnesses are the most comparable to SCPC and provide the best measure and comparison of equivalent risk and uncertainty from a market viewpoint. We note that at this time SCPC has corresponding risk and uncertainties to other gas transmission companies.

Dr. Spearman calculated DCF returns on equity for the Moody's Gas Transmission Stock Index companies. In the main, the results tended to fall within the range of 12.5% to 16.5%. We also note that this range is within the ranges of the other cost of capital witnesses applying DCF analysis to similar groups of gas transmission companies. Dr. Malkiel calculated a DCF cost of equity for a sample of ten large transmission companies using I/B/E/S estimates ranging from 12.2% to 17.1%. Mr. Gorman's application of a constant growth DCF using I/B/E/S estimates on this same group ranged from 12.35% to 16.63%. We also note that, although he proposed using a retention growth method, Dr. Legler did calculate a DCF estimate using Value Line 5-year growth rates on his group of gas transmission companies ranging from 10.32% to 18.79%.

Based upon a careful consideration of this evidence of record, and specifically finding that Dr. Spearman's DCF analysis of gas transmission companies most closely approximates the cost of equity capital to SCPC, we find and conclude that the reasonable cost of common equity for SCPC is the range of 12.50% to 16.50%. Based on SCPC's February 28, 1998 capital structure of 33% long-term debt and 67% common equity, and a 6.82% embedded cost of long-term debt, the corresponding overall rate of return is 10.63% to 13.31%.

SCPC's earnings have been shown to be subject to dramatic changes from year to year and season to season. Because of the volatility of revenues and returns associated with the competitive industrial market, a range is more appropriate than establishing a single point estimate.

Judge Brogdon's order remanding this matter states that we are not required to use cost of service as a means of setting industrial prices, but that we must " judge the effect of those prices using the rate of return for the whole company as its yardstick." Moreover, the order states that we are not required " to set the industrial prices based on that overall company return ...." The Commission therefore concludes that it will use the return on equity range to monitor SCPC's future earnings.

IT IS THEREFORE ORDERED THAT:

1. The fair overall return on equity for SCPC's total operations is 12.50% to 16.50% and a fair overall rate of return is 10.63% to 13.31%.

2. The return on equity will be used to monitor SCPC's future earnings.

3. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Guy Butler

Chairman

ATTEST:

Gary E. Walsh

Deputy Executive Director

(SEAL)

Commissioner Warren D. Arthur, IV, dissenting:

I respectfully dissent from the majority opinion which sets a return on equity in the range of 12.5% - 16.5% with a midpoint of 14.5%.

Pipeline's expert witness, Dr. Malkiel, applied a DCF analysis to three sample groups of companies. The sample groups were a group of telephone companies, a group of diversified gas companies, and the Hulse group of companies in the automotive parts industry and the semiconductor equipment industry. The average return on equity produced by the DCF analysis was 13.6% for the telephone companies, 14.4% for the gas companies, and 19.0% for the Hulse companies. Dr. Malkiel concluded that a return on equity of 14.5% to 17% was an appropriate return for Pipeline.

Dr. Legler, the expert witness for the Consumer Advocate, applied a DCF analysis, a risk premium analysis, and CAPM analysis to a group of gas transmission companies. Dr. Legler's DCF analysis produced an expected average return on equity of 12.30% to 12.49%. The risk premium analysis by Dr. Legler produced an expected return on equity of 10.73% to 11.11%, and the CAPM analysis produced an expected return on equity of 10.19% to 11.30%. Dr. Legler concluded that the return on equity appropriate for Pipeline ranged from 10.75 % to 12.50% and recommended using the midpoint of 11.60%.

The South Carolina Energy Users Committee's ("SCEUC's") witness, Mr. Gorman, used a DCF model, a risk premium model, and a CAPM analysis and applied these models to the group of integrated gas companies used by Dr. Malkiel and to a group of gas distribution companies followed by the Value Line Investment Survey. Mr. Gorman's DCF analysis produced an expected return on equity of 10.5% to 14.62%. His risk premium analysis produced an expected return of 11.20%, and the CAPM analysis produced an expected return of 10.60% to 11.30%. Mr. Gorman concluded that the appropriate return on equity ranged from 10.55% to 11.3% and recommended an authorized return on equity of 11.3%.

Staff witness, Dr. Spearman, applied a DCF analysis and a CAPM analysis to two comparison groups. The companies comprising the Moody's Gas Distribution Index were selected as one comparison group, and the companies comprising the Moody's gas Transmission Index were selected as the second comparison group. Dr. Spearman's DCF analysis produced an expected return on equity of approximately 9.0% to 11.0% for the gas distribution comparison group and 13.0% to 16.0% for the gas transmission comparison group. The CAPM analysis produced an expected return on equity of approximately 11.0% to 12.0% for each comparison group. Dr. Spearman then weighted the expected return on equity of the gas distribution company comparison group by the percentage of Pipeline's revenue derived from its resale gas operations and weighted the expected return on equity of the gas transmission company comparison group by the percentage of Pipeline's revenue derived from its industrial gas operations. Based on this weighting, Dr. Spearman concluded that the appropriate return on equity for Pipeline ranged from 10.5% to 13.0% and recommended a return on equity of 12.0% to 12.5% as most appropriate.

In my opinion, a return on equity as broad and high as the return set by the majority is grossly inappropriate. The range adopted by the Commission is too broad and much too high. The low end of the range is the extreme high end of the range recommended by Commission Staff, and the high end of the majority's adopted range is exceeded by only one-half percent by the high end of the range recommended by the Pipeline witness. Further, no witness recommended a range as broad as that adopted by the Commission. The net effect of the majority opinion is to set the rate of return at 16.5% since under the procedures on the Commission Pipeline will not be questioned about its earnings unless it earns in excess of 16.5%.

While the witness for Pipeline was an impressive witness, the Commission's decision is breaking new ground by approving a return on equity that covers four full percentage points above the highest non-company recommendation. I believe very strongly that we at the Public Service Commission are elected to make sure that both the consumers and the regulated utilities get a fair shake. We are not elected to try to justify anything the utility wants to the detriment of the consumers in South Carolina. I believe that this decision by the majority is a continuation of past decisions that have ignored the Staff recommendations and those of other parties such as the Consumer Advocate. I do not believe that this decision is fair to the consumers of South Carolina. At a minimum, I believe that there should have been some compromise between the recommendations of the parties. I am genuinely concerned that the consumers of this state did not get a fair shake in this matter.

Respectfully submitted,

Warren D. Arthur, IV
Commissioner, Sixth District